

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	14	("4553205" "5291602" "5579223" "5583781" "5644775" "5664206" "5678039" "5701487").PN. OR ("6092037").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/04/13 09:51
L2	1234030	translat\$3 computer program	US-PGPUB; USPAT; USOCR	OR	ON	2005/04/13 09:52
L3	5654	translat\$3 computer program	US-PGPUB; USPAT; USOCR	WITH	ON	2005/04/13 09:52
L4	847	3 language	US-PGPUB; USPAT; USOCR	WITH	ON	2005/04/13 09:52
L5	1	4 unicode	US-PGPUB; USPAT; USOCR	WITH	ON	2005/04/13 09:53
L6	8	4 (chinese or japanese or korean or latin)	US-PGPUB; USPAT; USOCR	WITH	ON	2005/04/13 09:53
L7	313	715/535.ccls.	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/04/13 11:28
L8	137	715/536.ccls.	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/04/13 11:29
L9	103	715/542.ccls.	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/04/13 11:29
L10	198	715/523.ccls.	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/04/13 11:29
S1	3	((("5,689,723") or ("6,507,812") or ("5,802,482")).PN.	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	OFF	2005/04/07 07:52
S32	1	("5,793381").PN.	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	OFF	2005/04/07 08:54

S33	0	"09613,083".apn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/07 08:54
S34	0	"09613083".apn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/07 08:54
S35	0	"09613083".an.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/04/07 09:47
S36	6	translating program unicode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2005/04/07 09:56
S37	25	translat\$3 program unicode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2005/04/07 09:58
S38	10	translat\$3 text select\$3 unicode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2005/04/07 11:46
S39	13	("5440482" "5485373" "5758314" "5787452" "5793381" "5832507" "5873111" "5929729" "6049869" "6055365").PN. OR ("6400287"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/04/07 10:02
S40	11	translat\$3 text code computer unicode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2005/04/07 11:52
S41	11	translat\$3 text code computer single byte	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2005/04/07 11:52
S42	7	convert\$3 text code computer single byte	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2005/04/07 11:52

S43	14	convert\$3 text code computer unicode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2005/04/07 11:52
S44	429	715/535-536.ccls.	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/04/07 11:57
S45	24	multilingual software code	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2005/04/07 13:23
S46	8	S45 translat\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2005/04/07 13:23

	1	Document ID	Issue Date	Title	Current OR	Inventor
1		US 200500157 20 A1	20050120	Document processing apparatus and document processing method	715/513	Yamamoto, Yuki et al.
2		US 200402682 43 A1	20041230	Document processing apparatus and document processing method	715/513	Yamamoto, Yuki et al.
3		US 200201939 85 A1	20021219	Method and system for displaying a user interface of an application program in a computer system, and a recording medium therefor	704/8	Park, Hee-Chun
4		US 200100274 60 A1	20011004	Document processing apparatus and document processing method	715/536	Yamamoto, Yuki et al.
5		US 200100113 69 A1	20010802	OBJECT TIME PROGRAM TRANSLATION SYSTEM	717/128	SATOYAMA, MOTOAKI et al.
6		US 6757688 B1	20040629	Enhancement for multi-lingual record processing	707/101	Leapaltd; Bernell A. et al.
7		US 6119078 A	20000912	Systems, methods and computer program products for automatically translating web pages	704/3	Kobayakawa; Takashi et al.

	1	Document ID	Issue Date	Title	Current OR	Inventor
8	X	US 6003049 A	19991214	Data handling and transmission systems employing binary bit-patterns based on a sequence of standard decomposed strokes of ideographic characters	715/535	Chiang; James

	1	Document ID	Issue Date	Title	Current OR	Inventor
1		US 200500275 47 A1	20050203	Chinese / Pin Yin / english dictionary	705/1	Chen, Yen-Fu et al.
2		US 200500103 92 A1	20050113	Traditional Chinese / simplified Chinese character translator	704/8	Chen, Yen-Fu et al.
3		US 200500103 91 A1	20050113	Chinese character / Pin Yin / English translator	704/8	Chen, Yen-Fu et al.
4		US 6842770 B1	20050111	Method and system for seamlessly accessing remotely stored files	709/203	Serlet; Bertrand et al.
5		US 6757688 B1	20040629	Enhancement for multi-lingual record processing	707/101	Leapaldt; Bernell A. et al.
6		US 6757688 B	20040629	Multi-lingual customer record processing system for e.g. multinational company, has translation program translating local customer information into Unicode format if local customer information is sent in local language format		LEAPALDT, B A et al.

	1	Document ID	Issue Date	Title	Current OR	Inventor
1		US 20050050052 A1	20050303	Centralized management of packaging data with artwork importation module	707/100	Zimmerman, Shannon M. et al.
2		US 20050044171 A1	20050224	Centralized management of packaging data having modular remote device control architecture	709/217	Bechtel, Joseph R. et al.
3		US 20030229543 A1	20031211	Centralized management of packaging data with rule-based content validation	705/26	Zimmerman, Shannon M. et al.
4		US 20030208539 A1	20031106	Event-driven information publication	709/205	Gildenblat, Ilya G. et al.
5		US 20030142333 A1	20030731	Printer driver and method for supporting worldwide single binary font format with built in support for double byte characters	358/1.11	Nguyen, Amanda et al.
6		US 20030040899 A1	20030227	Tools and techniques for reader-guided incremental immersion in a foreign language text	704/2	Ogilvie, John W.L.
7		US 20030004946 A1	20030102	Package labeling	707/9	VanDenAvond, Todd M. et al.
8		US 20020138521 A1	20020926	Relating to braille equipment	715/523	Sharp, Jonathan Paul

	1	Document ID	Issue Date	Title	Current OR	Inventor
9		US 6490051 B1	20021203	Printer driver and method for supporting worldwide single binary font format with built in support for double byte characters	358/1.15	Nguyen; Amanda et al.
10		US 6490051 B	20021203	Computer system for printing glyphs, translates text data to be printed from unicode standard to code capable of selecting device font provided character		NGUYEN, A et al.

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Thus, it can be seen that all of the methods described above for specifying the scope of conversion to Unicode can be applied to the requirements for conversion to the UTF-8 representation. It should be noted that UTF-8 data is not required to occupy an even number of eight-bit bytes, so that possible checks and diagnostics for an even number of bytes would not apply. However, in situations where a length modifier causes improper truncation of a UTF-8 byte string, a diagnostic would be appropriate.

Using the foregoing specification, the invention may be implemented using standard programming and/or engineering techniques using computer programming software, firmware, hardware or any combination or sub-combination thereof. Any such resulting program(s), having computer readable program code means, may be embodied within one or more computer usable media such as fixed (hard) drives, disk, diskettes, optical disks, magnetic tape, semiconductor memories such as Read-Only Memory (ROM), Programmable Read-Only Memory (PROM), etc., or any memory or transmitting device, thereby making a computer program product, i.e., an article of manufacture, according to the invention. The article of manufacture containing the computer programming code may be made and/or used by executing the code directly or indirectly from one medium, by copying the code from one medium to another medium, or by transmitting the code over a network. An apparatus for making, using, or selling the invention may be one or more processing systems including, but not limited to, central processing unit (CPU), memory, storage devices, communication links, communication devices, servers, input/output (I/O) devices, or any sub-components or individual parts of one or more processing systems, including software, firmware, hardware or any combination or sub-combination thereof, which embody the invention as set forth in the claims. User input may be received from the keyboard, mouse, pen, voice, touch screen, or any other means by which a human can input data to a computer, including through other programs such as application programs, databases, data sets, or files.

One skilled in the art of computer science will easily be able to combine the software created as described with appropriate general purpose or special purpose computer

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hardware to create a computer system and/or computer sub-components embodying the invention and to create a computer system and/or computer sub-components for carrying out the method of the invention. Although the present invention has been particularly shown and described with reference to a preferred embodiment, it should be apparent that modifications and adaptations to that embodiment may occur to one skilled in the art without departing from the spirit or scope of the present invention as set forth in the following claims.

I claim:

1. A data structure embodied in a computer-readable storage medium, said data structure representing information describing a character, said data structure comprising:

- a non-Unicode data structure containing a representation of a character string;
- a code page data structure containing an identification of a code page in which the non-Unicode character string is encoded;
- a mapping data structure containing a mapping table mapping a plurality of Unicode characters to corresponding to non-Unicode characters;
- a Unicode data structure containing a representation of a Unicode character string resulting from a translation of the non-Unicode character string into the Unicode character string by use of the mapping table; and
- a scope data structure containing a specification of a scope, the scope specifying a portion of a computer program subject to the translation.

2. The data structure of claim 1 wherein the scope is global, the global scope specifying that the translation applies to the entire computer program.

3. The data structure of claim 1 wherein the scope is local, the local scope specifying that the translation applies the subsequent portion of the computer program.

4. The data structure of claim 1 wherein the scope is constant specific, the constant specific scope specifying that the translation applies only to a specific constant.

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